L Number	Hits	Search Text	DB	Time stamp
19	30	("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/08/12 17:45
20	18	(("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) and (metal and wir$4)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/08/12 17:45
21	4	(US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.	USPAT	2004/08/12 17:45
22	16	((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) and (metal and wir$4)) not ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/08/12 18:02
23	9	("4412240" | "4673966" | "4791238" | "4893170" | "5373628" | "5410491" | "5723908" | "6421816" | "6436804").PN.	USPAT	2004/08/12 17:56
24	4	("4125854" | "4287571" | "4409499" | "4500906").PN.	USPAT	2004/08/12 18:01
25	0	6645842.URPN.	USPAT	2004/08/12 18:01
26	227	(wiring adj layer) and (metal near2 layer) and diagonal and ("IC" or (integrated adj circuit))	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/08/12 18:04

| 27 | 219 | ((wiring adj layer) and (metal near2 layer) and diagonal and ("IC" or (integrated adj circuit))) not ((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) ((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) and (metal and wir$4)) ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.) (((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) and (metal and wir$4)) not ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.)) (("4412240" \| "4673966" \| "4791238" \| "4893170" \| "5373628" \| "5410491" \| "5723908" \| "6421816" \| "6436804").PN.) (("4125854" \| "4287571" \| "4409499" \| "4500906").PN.)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/08/12 18:05 |

| 28 | 80 | (((wiring adj layer) and (metal near2 layer) and diagonal and ("IC" or (integrated adj circuit))) not ((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) ((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) and (metal and wir$4)) ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.) (((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) and (metal and wir$4)) not ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.)) (("4412240" \| "4673966" \| "4791238" \| "4893170" \| "5373628" \| "5410491" \| "5723908" \| "6421816" \| "6436804").PN.) (("4125854" \| "4287571" \| "4409499" \| "4500906").PN.))) and (conductor and (horizontal or vertical or manhattan)) | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/08/12 18:06 |

| 29 | | 69 | ((((wiring adj layer) and (metal near2 layer) and diagonal and ("IC" or (integrated adj circuit))) not ((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) ((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) and (metal and wir$4)) ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.) (((("4782193" or "4855253" or "5541005" or "5635736" or "5637920" or "5640327" or "5646830" or "5689433" or "5784289" or "5801385" or "581" "1863" or "5822214" or "5880969" or "5889329" or "5980093" or "6111756" or "6260183" or "6263475" or "6301686" or "6307256" or "6316838" or "6324674" or "6412097" or "6448591" or "6516455" or "6645842" or "20010009031" or "20020069397" or "20030025205").pn.) and (metal and wir$4)) not ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.)) (("4412240" \| "4673966" \| "4791238" \| "4893170" \| "5373628" \| "5410491" \| "5723908" \| "6421816" \| "6436804").PN.) (("4125854" \| "4287571" \| "4409499" \| "4500906").PN.))) and (conductor and (horizontal or vertical or manhattan))) and angle | USPAT; US-PGPUB; EPO; JPO; IBM_TDB | 2004/08/12 18:11 |

| 30 | 11 | (((((wiring adj layer) and (metal near2 layer) and diagonal and ("IC" or (integrated adj circuit))) not (((("4782193" or "4855253" or "5541005" or "5635736"
or "5637920" or "5640327" or "5646830" or "5689433"
or "5784289" or "5801385" or "581" "1863" or "5822214"
or "5880969" or "5889329" or "5980093" or "6111756"
or "6260183" or "6263475" or "6301686" or "6307256"
or "6316838" or "6324674" or "6412097" or "6448591"
or "6516455" or "6645842" or "20010009031" or
"20020069397" or "20030025205").pn.)
((("4782193" or "4855253" or "5541005" or "5635736"
or "5637920" or "5640327" or "5646830" or "5689433"
or "5784289" or "5801385" or "581" "1863" or "5822214"
or "5880969" or "5889329" or "5980093" or "6111756"
or "6260183" or "6263475" or "6301686" or "6307256"
or "6316838" or "6324674" or "6412097" or "6448591"
or "6516455" or "6645842" or "20010009031" or
"20020069397" or "20030025205").pn.) and (metal and wir$4)) ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.) (((("4782193" or "4855253" or "5541005" or "5635736"
or "5637920" or "5640327" or "5646830" or "5689433"
or "5784289" or "5801385" or "581" "1863" or "5822214"
or "5880969" or "5889329" or "5980093" or "6111756"
or "6260183" or "6263475" or "6301686" or "6307256"
or "6316838" or "6324674" or "6412097" or "6448591"
or "6516455" or "6645842" or "20010009031" or
"20020069397" or "20030025205").pn.) and (metal and wir$4)) not ((US-6338985-$ or US-6526555-$ or US-5822214-$ or US-6516455-$).did.)) (("4412240" \| "4673966" \| "4791238" \| "4893170" \| "5373628" \| "5410491" \| "5723908" \| "6421816" \| "6436804").PN.) (("4125854" \| "4287571" \| "4409499" \| "4500906").PN.)))
and (conductor and (horizontal or vertical or manhattan))) not (((((wiring adj layer) and (metal near2 layer) and diagonal and ("IC" or (integrated adj circuit))) not (((("4782193" or "4855253" or "5541005" or "5635736"
or "5637920" or "5640327" or "5646830" or "5689433"
or "5784289" or "5801385" or "581" "1863" or "5822214"
or "5880969" or "5889329" or "5980093" or "6111756"
or "6260183" or "6263475" or "6301686" or "6307256"
or "6316838" or "6324674" or "6412097" or "6448591"
or "6516455" or "6645842" or "20010009031" or
"20020069397" or "20030025205").pn.) | USPAT;
US-PGPUB;
EPO; JPO;
IBM_TDB | 2004/08/12
18:11 |

-	57	teig-steven.in.	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:12
-	0	overhauser-david.in.	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:13
-	0	fujimura-akira.in	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:14
-	4	teig-steven.in. and conduct$4	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:14
-	72	diagonal adj interconnection	USPAT	2004/02/18 17:25
-	54	(diagonal adj interconnection) and (substrate or board)	USPAT	2004/02/18 17:25
-	51	((diagonal adj interconnection) and (substrate or board)) and plurality	USPAT	2004/02/18 17:25
-	17460	wafer and (interconnect or (inter adj connect))	USPAT	2004/02/18 17:25
-	17458	(wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)	USPAT	2004/02/18 17:25
-	521	((wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)) and diagonal	USPAT	2004/02/18 17:25
-	366	(((wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)) and diagonal) and (conduct$4 and plurality)	USPAT	2004/02/18 17:25
-	353	((((wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)) and diagonal) and (conduct$4 and plurality)) and circuit	USPAT	2004/02/18 17:25
-	298	(((((wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)) and diagonal) and (conduct$4 and plurality)) and circuit) and metal	USPAT	2004/02/18 17:25
-	74	((((((wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)) and diagonal) and (conduct$4 and plurality)) and circuit) and metal) and (diagonal with $5connect$4)	USPAT	2004/02/18 17:25
-	0	(((((((wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)) and diagonal) and (conduct$4 and plurality)) and circuit) and metal) and (diagonal with $5connect$4)) and (prefer$4 adj direction)	USPAT	2004/02/18 17:25
-	0	((wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)) and (manhattan adj direction)	USPAT	2004/02/18 17:25
-	46	Manhattan with direction	USPAT	2004/02/18 17:25
-	29	(Manhattan with direction) and interconnect$4	USPAT	2004/02/18 17:25
-	115	(complement$4 with (wiri$4 adj layer))	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25

-	87	((complement$4 with (wiri$4 adj layer))) and direction	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	80	(((complement$4 with (wiri$4 adj layer))) and direction) not ((((complement$4 with (wiri$4 adj layer))) and direction) and diagonal)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	67	((((complement$4 with (wiri$4 adj layer))) and direction) not ((((complement$4 with (wiri$4 adj layer))) and direction) and diagonal)) and (plurality)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	60	(((((complement$4 with (wiri$4 adj layer))) and direction) not ((((complement$4 with (wiri$4 adj layer))) and direction) and diagonal)) and (plurality)) and metal	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	60	((((((complement$4 with (wiri$4 adj layer))) and direction) not ((((complement$4 with (wiri$4 adj layer))) and direction) and diagonal)) and (plurality)) and metal) and layer	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
	0	(((((((complement$4 with (wiri$4 adj layer))) and direction) not ((((complement$4 with (wiri$4 adj layer))) and direction) and diagonal)) and (plurality)) and metal) and layer) and manhattan	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	0	6526555.URPN.	USPAT	2004/02/18 17:25
-	10	"6316838"	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	6	("5495398" | "6100594" | "6104084" | "6118176" | "6118184" | "6181002").PN.	USPAT	2004/02/18 17:25
-	9	6316838.URPN.	USPAT	2004/02/18 17:25
-	18	"6150193"	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	39	("4508758" | "4530152" | "4768081" | "4890383" | "5087961" | "5102829" | "5126818" | "5153379" | "5173766" | "5216278" | "5227663" | "5239198" | "5241133" | "5250470" | "5258650" | "5311060" | "5336931" | "5371404" | "5386342" | "5397746" | "5436203" | "5468999" | "5473512" | "5474957" | "5489059" | "5578525" | "5593926" | "5596485" | "5600181" | "5612513" | "5639989" | "5700981" | "5719440" | "5767447" | "5776798" | "5973263" | "5973337" | "5981314" | "5990545").PN.	USPAT	2004/02/18 17:25
-	1	"5136366".PN.	USPAT	2004/02/18 17:25
-	50	5336931.URPN.	USPAT	2004/02/18 17:25
-	30	("4508758" | "4530152" | "4890383" | "5102829" | "5126818" | "5173766" | "5216278" | "5227663" | "5239198" | "5241133" | "5250470" | "5258650" | "5311060" | "5336931" | "5386342" | "5397746" | "5436203" | "5468999" | "5473512" | "5474957" | "5489059" | "5578525" | "5593926" | "5596485" | "5612513" | "5639989" | "5700981" | "5719440" | "5767447" | "5776798").PN.	USPAT	2004/02/18 17:25

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-	1	((diagonal adj interconnection) and (substrate or board)) and (wiri$3 adj layer)	USPAT	2004/02/18 17:25
-	6	("3701112" | "4079207" | "4566007" | "5162944" | "5430561" | "6215786").PN.	USPAT	2004/02/18 17:25
-	16	("3329474" | "3614191" | "3650602" | "4422088" | "4813769" | "4850682" | "4917452" | "4969717" | "5071232" | "5107357" | "5134516" | "5159473" | "5162944" | "5193130" | "5204771" | "5258871").PN.	USPAT	2004/02/18 17:25
-	30	(((diagonal adj interconnection) and (substrate or board)) and plurality) and (integrated adj circuit)	USPAT	2004/02/18 17:25
-	21	(((diagonal adj interconnection) and (substrate or board)) and plurality) not ((((diagonal adj interconnection) and (substrate or board)) and plurality) and (integrated adj circuit))	USPAT	2004/02/18 17:25
-	21	(diagonal adj interconnection) not (((diagonal adj interconnection) and (substrate or board)) and plurality)	USPAT	2004/02/18 17:35
-	9	("2865082" | "2893929" | "3423517" | "3436605" | "3518756" | "3522087" | "3618202" | "3723176" | "3791938").PN.	USPAT	2004/02/18 17:25
-	61	((((((wafer and (interconnect or (inter adj connect))) not (diagonal adj interconnection)) and diagonal) and (conduct$4 and plurality)) and circuit) and metal) and (diagonal with $5connect$4)) and (direction)	USPAT	2004/02/18 17:25
-	5	("5640327" | "5822214" | "6260183" | "6324674" | "6412097" | "2001/0009031").PN.	USPAT	2004/02/18 17:25
-	5	6412097.URPN.	USPAT	2004/02/18 17:25
-	3	Manhattan adj direction	USPAT	2004/02/18 17:25
-	22	((Manhattan with direction) and interconnect$4) and wiri$4	USPAT	2004/02/18 17:25
-	7	("4805113" | "5340772" | "5341024" | "5532934" | "5568636" | "5822214" | "5831459").PN.	USPAT	2004/02/18 17:25
-	10	((Manhattan with direction) and interconnect$4) not (((Manhattan with direction) and interconnect$4) and wiri$4)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	7	(((complement$4 with (wiri$4 adj layer))) and direction) and diagonal	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	60	(((((((complement$4 with (wiri$4 adj layer))) and direction) not (((((complement$4 with (wiri$4 adj layer))) and direction) and diagonal)) and (plurality)) and metal) and layer) and circuit	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	1	"6526555"	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	5	("5640327" | "5822214" | "6260183" | "6324674" | "6412097" | "2001/0009031").PN.	USPAT	2004/02/18 17:25
-	16	("4918614" | "5095343" | "5130767" | "5175693" | "5222030" | "5300815" | "5323036" | "5329157" | "5341024" | "5358886" | "5398195" | "5399898" | "5416720" | "5513119" | "5532934" | "5566078").PN.	USPAT	2004/02/18 17:25

-	18	5822214.URPN.	USPAT	2004/02/18 17:25
-	18	non-orthogonal with (metal near2 layer)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:25
-	0	(conduct$4 adj wire) and (manhattan adj direction)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:36
-	45	(conduct$4 adj wire) and (manhattan)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:36
-	8	((conduct$4 adj wire) and (manhattan)) and (plurality with wir$4)	USPAT; US-PGPUB; EPO; JPO; IBM_TDB	2004/02/18 17:37
-	1	"5757656".PN.	USPAT	2004/02/18 17:42
-	4	6516455.URPN.	USPAT	2004/02/18 17:42